

REMARKS

Claims 1-3, 8, 11, 15, and 16 are now pending in the application. Claims 1, 8, 11 are amended. Claims 9, 10, 12, 13, and 14 are cancelled. No new matter is presented. The above amendments and the following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance. An early Notice of Allowance is therefore requested.

The Examiner has rejected claims 1, 8, and 11 under 35 U.S.C. § 112 as being indefinite. Claims 1, 8 and 11 are amended. No new matter is presented. In view of these amendments, Applicants request that the rejection of claims 8, 11, 12, and 14 be withdrawn.

The Examiner has rejected claims 1-3, and 15 under 35 U.S.C. 102(b) as being unpatentable by Hanada (U.S. Patent No. 5,400,170). Claim 1 is amended to incorporate the features recited in claims 9, 10, 12, 13, and 14. In view of these amendments, Applicants traverse the rejection of claims 1-3 and 15.

Claim 1 is amended to incorporate features recited in claims 9, 10, 12, 13, and 14. No new matter is presented.

Hanada is directed to a method of controlling the size of light beam pulses used to form plural pixels on a print medium. The plural successive light beam pulses are directed through a continuously adjustable aperture. An actuator is driven to change an aperture diameter of the continuously adjustable aperture for each of the plural successive light beam pulses directed there through. The aperture diameter is adjusted with the pixel diameter of each respective plural pixels being printed on a print medium by the plural successive light beam pulses.

In contrast to the method disclosed in Hanada, the present invention provides a highly accurate pinhole which can be closed in a light-tight manner and whose aperture has a square shape at values above zero. The device of Hanada provides the disadvantages that the claimed invention overcomes. Specifically, since Hanada provides a scissor like closure mechanism which poses a serious obstacle to a reproducible, light tight closure and exact square shape of the pinhole aperture, it is submitted that Hanada fails to teach or suggest all the features recited in claims 1 and 8.

More specifically, the present invention provides these advantages because the pinhole aperture formed from the foil edges consist in that the corners of the pinhole aperture are sharp-edged and the radius of curvature of the corners is zero. This allows the pinhole apertures to be adjusted in a reproducible manner upward from zero.

As mentioned above, Hanada discloses a scissor-like closure mechanism for a pinhole. In other words, Hanada does not teach or suggest foil edges as disclosed in the claimed invention. As previously submitted in the Response to the Office Action dated June 14, 2006, the foil edges as disclosed in the claimed invention are not the same as the members 1 and 2 disclosed in Hanada. Specifically, the members 1 and 2 disclosed in Hanada are members that have scissor cuts that are used for the closing mechanism. In addition, Hanada only discloses two members whereas the present invention provides a plurality of foil edges. The increased amount of foil edges provides greater accuracy. Therefore, the present invention enables the ability to realize very small apertures to limit the illumination or detection point down to the diffraction limit. It should be noted that the claimed invention overcomes the disadvantages of the device of Hanada. (See Background of the Invention). Therefore, it is submitted that the foil edges of the claimed invention are neither taught nor suggested by Hanada. Therefore, Applicants request the withdrawal of the rejection of claim 1 under 35 U.S.C. 102(b).

Claims 2, 3, and 15 are dependent upon claim 1. Therefore, it is submitted that for at least the reasons mentioned above, claims 2, 3, and 15 recite patentable subject matter.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanada in view of Bell (U.S. Patent No. 5,105,582). The Examiner takes the position that the combination of Hanada and Bell teach or suggest all the features recited in claim 16. Applicants respectfully disagree.

Bell is directed to a golf cup cutter sharpener. Applicants submit that there is no motivation to combine the cited references to disclose the features of the claimed invention. One skilled in the art would not combine the teachings of using the method in cutting a golf cup to that of a laser scanning microscope. In addition, Bell does not cure the deficiencies of Hanada. In particular, the combination of the cited references fails to teach or suggest the foil edges of the claimed invention. Therefore, Applicants submit that claim 16, which is dependent upon claim 15, recites patentable subject matter for at least the reasons mentioned above. Accordingly, Applicants request the withdrawal of the rejection of claim 16 under 35 U.S.C. 103(a).

For the reasons presented above, claims 1-3, 8, 11, 15, and 16, all the claims pending in the application, are believed by Applicants to define patentable subject matter and should be passed to issue at the earliest possible time. A Notice of Allowance is requested.

Respectfully submitted,



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